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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/407,594	09/28/1999	GARY M. KING	PO9-99-147	2954

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EXAMINER

PHAM, THOMAS K

ART UNIT PAPER NUMBER

2121

DATE MAILED: 05/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/407,594

Applicant(s)

KING ET AL.

Examiner

Thomas K. Pham

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 March 2005.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4, 6-14, 16-25 and 27-34 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☒ Claim(s) 8, 9, 18, 19, 29 and 30 is/are allowed.  
6) ☒ Claim(s) 1-4, 6, 7, 10-14, 16, 17, 20-25, 28 and 31-34 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

***Response to Arguments***

1. This action is in response to request for re-consideration filed on 03/04/2005.
2. Applicant's amendment, with respect to the new issue of claims 1, 11, 21 and 22, necessitated the new ground(s) of rejection presented in this Office action.

**Quotations of U.S. Code Title 35**

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

### **Claim Rejections - 35 USC § 102**

7. Claims 1-4, 6-7, 10-14, 16-17, 20-25, 27-28 and 31-34 rejected under 35 U.S.C. 102(b) as being anticipated by Dussa et al. "Dynamic Partitioning in a Transputer Environment" April 1990, ACM SIGMETRICS Performance Evaluation Review, Proceedings of the 1990 ACM SIGMETRICS conference on Measurement and modeling, vol. 18 issue 1 (hereinafter Dussa).

#### **Regarding claims 1, 11, 21 and 22**

Dussa teaches managing logical processors of a computing environment, comprising:

- configuring a logical partition of said computing environment with one or more logical processors (page 203, abstract 1<sup>st</sup> paragraph, "Parallel programs are characterized ... processors to programs optimally");
- employing a workload manager to dynamically adjust configuration of the logical partition based on workload of the logical partition, the workload manager:
  - o automatically evaluating workload of the logical partition and automatically determining therefrom that said configuration of the logical partition is to be adjusted (page 205, 1<sup>st</sup> paragraph, "Figure 1 illustrates the ... and analytical analysis"); and
  - o dynamically adjusting the configuration of the logical partition in response to workload of the logical partition (page 204, 1<sup>st</sup> paragraph, "With dynamic partitioning, ... performance improvements exists").

*It should be noted that the host processor is also doing the job of the workload manager as it evaluates the current workload when determining the optimal number of processors to be use efficiently for each partition.*

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**Regarding claims 2, 12 and 23**

Dussa teaches automatically evaluating workload of the logical partition comprises automatically evaluating at least one of a capacity assignment or capacity use of the logical partition (page 205, 1<sup>st</sup> paragraph, “Figure 1 illustrates the ... and analytical analysis”).

**Regarding claims 3, 4, 13, 14, 24 and 25**

Dussa teaches dynamically adjusting comprises increasing or decreasing a number of logical processors allocated to said logical partition (page 205 second column 1<sup>st</sup> paragraph, “The internals of each galaxy ... the total length of execution”).

**Regarding claims 6, 16 and 27**

Dussa teaches the determination is performed at a plurality of time intervals (page 206, 4<sup>th</sup> paragraph, “Communication between tasks is ... in their appropriate partition”).

**Regarding claims 7, 17 and 28**

Dussa teaches using a predefined equation in making the determination (page 206, 2<sup>nd</sup> paragraph, “This program is computation intensive ... candidate for parallelism”).

**Regarding claims 10, 20 and 31**

Dussa teaches comparing result times of a selected processor with the time thresholds to determine whether the adjustment is to be made (page 211 session 6 ANALYTICAL MODEL).

**Regarding claims 32, 33 and 34**

Dussa teaches dynamically adjusting the configuration of the logical partition without negotiating with another logical partition of the computing environment (page 206, 4<sup>th</sup> paragraph, “Communication between tasks ... in their appropriate partition”. *The host*

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*determines the processor reallocation based on calculation of best value without negotiating with any of the partitions within the computing environment.)*

### ***Response to Arguments***

8. Applicant's arguments with respect to claims 1-4, 6-7, 10-14, 16-17, 20-25, 27-28 and 31-34 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.


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Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner *Thomas Pham*; whose telephone number is (571) 272-3689, Monday - Thursday from 6:30 AM - 5:00 PM EST or contact Supervisor *Mr. Anthony Knight* at (571) 272-3687.

Any response to this office action should be mailed to: **Commissioner for Patents, P.O. Box 1450, Alexandria VA 22313-1450**. Responses may also be faxed to the **official fax number (703) 872- 9306**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**Thomas Pham**  
*Patent Examiner*

  
May 5, 2005

  
**Anthony Knight**  
**Supervisory Patent Examiner**  
**Group 3600**